

36. The computer system as recited in claim 32, wherein said second computer is further programmed with scoring software which calculates an image quality value using weighting coefficients received from said first computer.

37. The computer system as recited in claim 34, wherein said second computer is further programmed with scoring software which calculates an image quality value using weighting coefficients received from said first computer, and said design of experiment toolset comprises a regression tool for generating transfer functions based at least in part on said scoring.

38. A method of setting up a simulation in a design of experiment mode, comprising the steps of:

specifying a probe geometry characteristic by interacting with a first graphical user interface window;

specifying an imager parameter by interacting with a second graphical user interface window;

specifying a weighting coefficient for an image quality parameter by interacting with a third user interface window; and

creating computer files comprising specifications specified during said specifying steps in response to an input to a fourth user interface window.

39. A graphical user interface comprising a sequence of windows which allow a user to set up a simulation in a design of experiment mode, said sequence comprising:

a first window for enabling a user to specify a probe geometry characteristic;

a second window for enabling a user to specify an imager parameter;

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a third window for enabling said user to specify a weighting coefficient corresponding to an image quality parameter; and

a fourth window for activating creation of computer files comprising specifications specified using said first through third windows.